



NATIONAL MARINE
SANCTUARIES TM

Monterey Bay National Marine Sanctuary
(MBNMS)

Multicultural Education for Resource
Issues Threatening Oceans
(MERITO)

**MERITO Program Report
2007 - 2010**

August 2010

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service
Office of National Marine Sanctuaries



NOAA Ocean Service

Multicultural Education for Resource Issues Threatening Oceans (MERITO) 2007-2010



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Executive Summary

Between 2007-2010, MERITO continued to serve historically disadvantaged communities in the Monterey Bay area, focusing on Seaside, Marina, Watsonville and Salinas, CA. A total of **10,805** local residents were **directly** reached through place-based education and outreach, volunteer opportunities, community events, and professional development programs.

Total population **directly served** by MERITO since 2002:

	2002-2007	FY2008	FY2009	FY2010	2007-2010
Direct Contact					
Middle School and After School students	971	420	625	734	1,779
Adult ESL students	2, 256	107	527	120	754
Paid Internships	7	0	0	3	3
Families (Family Field Experiences)	671	0	16	95	111
Teachers & youth leaders (MERITO Academy)	380	42	42	44	91
General Public (Community Events)	19, 549	2,000	2,087	3,250	7,337
High School teachers (MLML Teacher Training)	N/A	20	0	0	20
On-demand programs (MS, HS, Summer)	60	0	114	22	136
Peer-to-peer professional development	90	105	275	45	425
Volunteer Opportunities	N/A	0	112	37	149
TOTAL Reached	23, 834	2,694	3,798	4,350	10,805

PLACE-BASED EDUCATION AND OUTREACH

MERITO Academy served **1,779** 5th – 8th grade students, in 25 different school sites in Monterey and Santa Cruz Counties. **150** MERITO students received full scholarships to attend week-long residential and day-camp summer programs offered by Camp SEA Lab. MERITO served **754** adult ESL students. **111** adults and children attended Family Field Experiences. **7,337** local residents were directly contacted at community events. **136** students were served through on-demand one-day programs.

PROFESSIONAL DEVELOPMENT AND INTERNSHIP PROGRAM

Six MERITO Academy teacher trainings, served **91** teachers and youth leaders. MERITO staff assisted MLML's science teacher workshop, leading a 2-hour session for **20** teachers from central and southern California. MERITO staff offered multicultural pedagogy outreach and professional development to **425** pre-service and in-service educators. MERITO signed an agreement with the Monterey Institute of International Studies (MIIS) for co-sponsoring graduate-level interns, and hired **3** MIIS students to assist the team in the implementation of two different projects.

MEDIA-BASED COMMUNITY OUTREACH

An estimated **2 million** people were potentially reached through media-based channels including: Immersion Learning™ ("Monterey Bay Immersion Presents"), Thank You Ocean campaign (Spanish website and PSA), Univision Network (KSMSTV Monterey-Salinas local news), and BLUE Ocean Film Festival (MERITO student's digital stories).

INTERNATIONAL NOAA PROGRAMS SUPPORT

MERITO staff assisted (as supporting instructors and bilingual interpreters) in **3** NOAA international MPA management capacity building programs in Chile, Ecuador and Mexico.

FUNDRAISING

MERITO received a total of **\$301,724** in grants between 2007 and 2010. A total of **27** grant proposals were submitted to different funding agencies, requesting an average of **\$1,250,000.00** every year.



MERITO
2007-2010

MERITO is an evolving multicultural education and outreach initiative aiming to enhance the contribution of NOAA's Office of National Marine Sanctuaries to build a conscious and culturally inclusive constituency for ocean protection in central and southern California.



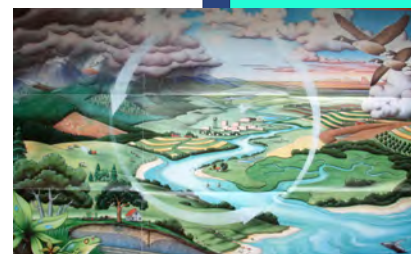
Mission

MERITO's mission is to help advance ocean literacy development among culturally diverse residents, and promote a culturally inclusive ocean stewardship ethic, engaging diverse communities to protect coastal and marine ecosystems.

Program Overview

MERITO operates in Monterey Bay and Channel Islands National Marine Sanctuaries, offering adult and youth education programs, family field experiences, professional development for teachers and youth leaders, teaching resources, bilingual outreach, internships, and career mentoring, all geared for diverse multicultural communities.

MERITO's goal is to promote ocean literacy among culturally diverse residents in the central coast of California, and engage diverse communities in proactively and cooperatively contributing to protect and restore coastal and marine ecosystems in our region. The program is designed to encourage better public understanding of specific ocean-related issues within sanctuaries, and their connections to in-land human activity. It promotes community participation to address these issues, and motivates culturally diverse students to pursue careers in marine sciences and resource protection.



Program Overview



PLACE-BASED EDUCATION AND OUTREACH

This program component has been implemented through partnerships with school districts, adult schools, middle schools, migrant parent groups, local cities, and non-profit groups, to directly interact with members of the community, representing a broad range of ages and cultural backgrounds. The goal has been to promote and facilitate ocean and watershed literacy within community-specific contexts, in terms of place, social interactions, and education institutions.

1. MERITO Academy

a. Target Audience: Middle school (5th-8th grade) students from historically under-served communities in the central California coast.

b. Description:

MERITO Academy is a curriculum-based science education program, focusing on watersheds and ocean literacy. It is implemented in both formal classroom and informal after-school settings. The curriculum contains 36 lessons, developed (or adapted) in collaboration with local schools, extended learning programs and regional environmental education providers, such as ESNERR, Monterey Bay Aquarium, local waste water treatment plants and landfills, CSU Monterey Bay's Return of the Natives, the City of Watsonville's Environmental Program, Whales on Wheels, among others. All the lessons are aligned to California State Standards in mathematics, science, language arts, visual and performing arts, and English language development. The program is designed to be implemented throughout a full academic year, providing meaningful long-term, hands-on opportunities for students to learn about their local coastal environment, both in class and outside in local natural areas, with the assistance of scientists and experts.

c. Accomplishments:

Between 2007 and 2010 MERITO Academy has served 1,779 5th – 8th grade students (most of them bilingual and bicultural), in 25 different school sites in Monterey and Santa Cruz Counties.

d. Evaluation:

A professional evaluation consultant assists the MERITO team, in conducting a rigorous external evaluation. The program has been evaluated for attitudinal change, experiences in nature, watershed literacy knowledge, and exposure to career opportunities in science. Pre and post surveys have been implemented at the beginning and end of each academic year in order to assess the change in responses before and after the program. Evaluation results consistently show (year after year) a significant increase in watershed related knowledge and conservation oriented attitudes (Full evaluation reports are available upon request).



2. MERITO Partnerships with California State University Monterey Bay (CSUMB) - Camp Science.Education.Adventure (SEA) Lab

a. Target Audience: MERITO Academy students

b. Description:

Supported by a NOAA Environmental Ocean Literacy Grant, this three-year partnership run from September 2006 – August 2009. MERITO staff worked closely with Camp SEA Lab to develop and implement residential and non-residential science camp and related programs to disseminate Ocean Literacy Principles via experiential learning. MERITO served as Camp SEA Lab's key outreach mechanism to reach underserved youth and their families, while MERITO participants benefited from scholarships to attend week-long summer programs.

c. Accomplishments:

Between 2007 and 2009, 150 MERITO students were offered full scholarships to attend week-long residential and day-camp summer programs offered by Camp SEA Lab. MERITO students attended one week at either of the following day camps: 1) Elkhorn Slough and You! or 2) Seals and Sails. Forty MERITO students attended one of four residential camps: 1) Waves to Watersheds (housed at Hidden Falls Camp in Soquel); 2) Fishing for Adventure (housed at CSU Monterey Bay); 3) Keepers of the Coast (housed at UC Santa Cruz); 4) Girls Love Science (housed at UC Santa Cruz).

d. Evaluation: N/A



Place-Based
Education &
Outreach



3. MERITO Adult Education

a. **Target Audience:** Adult English as Second Language (ESL) students

b. **Description:**

In the period 2007-2010, the MERITO team revised and restructured its Adult Education strategy. It shifted from a system of numerous one-time classrooms visits (with little or no follow up) to a more in-depth 8-week curriculum-based program, integrated into existing English as Second Language (ESL) classes. Between 2008 and 2009 a needs assessment was conducted to get feedback from ESL students, teachers, and administrators in the city of Salinas, CA. Based on this needs assessment, a curriculum was developed for the Salinas Adult School's ESL program with two goals: 1) increase watershed and ocean literacy among historically underserved adult learners in the City of Salinas; and 2) provide students who voluntarily attend the Salinas Adult School (mostly to learn English and improve their chances of getting better jobs) with useful support to enter career paths, and access better-paid job opportunities, within an emerging green job market. The class was designed as a place-based learning experience, focusing on watersheds and ocean literacy, yet attempting to integrate ESL learning, place-based education for sustainability, and vocational training in the context of an emerging "green" economy. This class was piloted and evaluated in 2010.

c. **Accomplishments:**

Between 2007 - 2010, MERITO served a total of **754** adult ESL students. 634 of these students were reached between 2008 and 2009, following the old model of one-time classroom presentations (in which MERITO staff introduced the MBNMS and basic concepts of watershed literacy). 527 of these students, participated in the needs assessment leading to an updated model for MERITO adult ed. In 2010, a pilot 8-week class called "*Salinas: Water, Ecology and Green Jobs*" was tested and externally evaluated. 120 students participated in this class, learning concepts related to watershed and ocean literacy, Salinas local economy, land use history, coastal ecology, and career pathways leading to green job opportunities in their own watershed and larger water basin (lower Salinas valley).

d. **Evaluation:**

This program was externally evaluated by independent consultant David Dobrowski, who has been evaluating various components of the MERITO program since 2007. The evaluation of the 2010 pilot class shows a very positive response from participants and accomplishment of expected learning outcomes (full evaluation report is available upon request).



**Place-Based
Education &
Outreach**

4. Family Field Experiences

a. **Target Audience:** Families in underserved communities of Monterey and Santa Cruz Counties.

b. **Description:**

“Family Field Experiences” seeks to engage local families to practice more outdoor exploration in special areas along the MBNMS coast. Between 2003 and 2007, the MBNMS-MERITO program partnered with the Elkhorn Slough National Estuarine Research Reserve (ESNERR), Monterey Bay Kayaks, Boys and Girls Clubs of Monterey County (BGCMC), and local School Districts, to lead a series of Spanish-English bilingual family field experiences each year, around the Monterey Bay area. The goal was to reach an audience that may not otherwise have watershed or marine-related outdoor hands-on experiences and provide an opportunity for families to engage in meaningful experiences with nature. Unfortunately, this successful program component has been drastically reduced in the period 2007 - 2010, due to limited funding.

c. **Accomplishments:**

In 2009 MERITO received a small grant from the Monterey Bay Sanctuary Foundation to implement Family Field Experiences, focusing on Marine Protected Areas (MPA) outreach. MERITO staff collaborated with the Boys and Girls Club of Monterey County (BGCMC), and Elkhorn Slough National Estuarine Research Reserve (ESNERR) to offer a series of guided outdoor-exploration opportunities, serving historically underrepresented communities (primarily Latino) and highlighting marine protected areas (MPAs) along the central California coast. A total of **51** adults and children attended these field trips. Additionally, the pilot watershed and ocean literacy ESL class, at the Salinas Adult School, also incorporated three field trips to three parts of the local watershed (Gabilan). A total of **60** adult students participated in all three field trips.

d. **Evaluation:**

Evaluation of impact is only available for the field trips associated to the adult education curriculum. The participant’s surveys indicate a strong unanimous satisfaction with the learning contribution and the experience itself, in all cases (evaluation report available upon request).



**Place-Based
Education &
Outreach**

5. Community Events

a. Target Audience: “General Public” (Latino population in Monterey and Santa Cruz Counties).

b. Description & Need:

Participating in local community events has been a major outreach strategy of MERITO. In partnership with various regional groups, MERITO staff has been involved since 2002 in a variety of events informing communities about the sanctuary and providing bilingual marine and watershed conservation messages. These events have served as a platform for building awareness and informing diverse communities about ocean and watershed related issues including water quality, pollution, solid waste and marine debris, wastewater, beach closures, sustainable fishing, marine reserves and ecological integrity in general. They have also served to offer people volunteer opportunities to become more involved in ocean and watershed protection.

c. Accomplishments:

Between 2007 - 2010, MERITO attended 4-5 community events per year, mainly: Monterey Bay Aquarium Community Day, Watsonville’s Earth Day and Día del Niño, Monterey Bay Aquarium World Ocean’s Day, MBNMS Coastal Discovery Center Fair (San Simeon), Salinas Ag Expo, Hartnell College’s Family Science and Health Day (Salinas), and Santa Rita Creek Fair (Salinas). A total of **7,337** people were directly contacted through these events. While these were very short interactions, they served to increase visibility of the MBNMS and remind people of their local connections to the ocean.

d. Evaluation: N/A



6. On-demand lectures and educational field experiences

a. **Target Audience:** Non-MERITO School and Summer programs

b. **Description:**

The MERITO team occasionally receives requests from Middle & High School groups and Summer programs to provide guided field-based and hands-on activities focusing on watersheds and ocean literacy. While this is not a formal aspect of our program, we usually make an effort to accommodate these requests whenever possible.

c. **Accomplishments:**

A total of **136** students were served through these kind of experiences. **In 2008** MERITO staff gave two bilingual presentations to a group of 60 5-9th grade students from Salinas (most of them Latinos), enrolled in a week-long outdoor school program coordinated by the Sempervirens Outdoor School and the Exploring New Horizons program. The interactive presentations focused on watersheds and non-point source pollution. **In 2009** MERITO staff hosted a full-day bilingual educational field trip to the Elkhorn Slough Estuarine and Research Reserve (ESNERR) for a group of 54 Latino high school students from San Jose. This field trip was organized for the *Extreme Science Program* (ESP) at the National Hispanic University in San Jose. The ESP is a charter High School focusing on inspiring students towards scientific discovery through hands-on activities and interactive projects. **In 2010** MERITO staff presented an overview of history and land-to-sea connections in the lower Salinas valley to adult organic farming students at the Agriculture and Land-based Training Association (ALBA) in Salinas, CA. This is part of an ongoing effort to link adult education opportunities and green careers focusing on watershed literacy and environmental protection in the Salinas valley.

d. **Evaluation:**

N/A

7. Volunteer Programs

a. **Target Audience:** Community at large (Latino population in Monterey and Santa Cruz Counties).

b. **Description:**

The MBNMS has a number of volunteer opportunities to engage the community in programs and activities for water quality protection and environmental stewardship. The MERITO team strives to make these opportunities as widely inclusive as possible, making them accessible to historically underserved segments of the local population.

c. **Accomplishments:**

Between 2007 - 2010, MERITO recruited a total of **149** volunteers, to participate in the water quality monitoring program *Snapshot Day*, and marine debris awareness and prevention program *Coastal Clean Up Day*.

d. **Evaluation:** N/A



**Place-Based
Education &
Outreach**

PROFESSIONAL DEVELOPMENT AND INTERNSHIPS

This program component is designed to empower, support, and provide teaching resources to educators and youth leaders who serve culturally diverse and under-represented communities in the Monterey Bay area. It also provides paid-internship opportunities for college students.

1. MERITO Academy Teacher Training

a. **Target Audience:** Middle School science teachers and after-school program leaders.

b. Description:

The MERITO Academy training is an integral part of the MERITO Academy program, and it is required for all teachers and site coordinators involved in it. This training responds to an identified need for professional development opportunities, offering theoretical background and practical training on marine and watershed science to teachers and youth leaders serving underrepresented communities. The training provides teachers and youth leaders with pedagogical tools, teaching resources, and community contacts, geared to facilitate meaningful experiences in nature for culturally diverse students, and to incorporate locally relevant watershed and ocean issues into public education and extended-learning programs. Practical demonstrations of selected lesson plans, included in the MERITO Academy curriculum, guide trainees on how to implement field and in-class activities from the Activity Guide. The training also emphasizes pedagogical considerations and tools, geared to adapt the curriculum presentation and implementation to a multicultural audience.

c. Accomplishments:

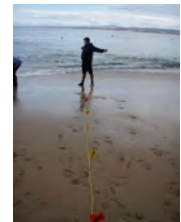
Between 2007 - 2010, MERITO offered 6 teacher trainings, serving a total of 91 teachers and youth leaders (both returning and new members of the MERITO Academy). During the training, site coordinators receive an Activity Guide and a Resource Kit with materials to help implement watershed and ocean based activities in their classrooms. Each site also receives a transportation and materials scholarship, primarily for field-based activities, during program implementation. These site leaders multiplied MERITO's capacity by serving a total of 1,779 students from historically underserved communities, between 2007 and 2010.

d. Evaluation:

Evaluation of this teacher training is contained within a comprehensive external evaluation plan conducted every year for the MERITO Academy program by independent consultant David Dobrowski. Full annual reports are available upon request.



Professional Development & Internships



2. MERITO participation in Moss Landing Marine Lab's (MLML) High School Teacher Training

a. Target Audience: High School science teachers

b. Description:

Moss Landing Marine Labs (MLML) offers an annual Summer Teacher Academy ("Lab and Field Explorations in Marine Science") for local high school science teachers, focusing on marine sciences and conservation issues. These workshops provide teachers with content support, teaching materials, access to a regional network of marine-related organizations, peer support opportunities to strengthen ongoing curricula, and assistance to develop evaluation plans. The MERITO team has intermittently participated in this training as supporting teaching staff. MERITO's contribution not only relates to specific content and demonstration of classroom activities, but also to pedagogical considerations to adapt programs for multicultural audiences.

c. Accomplishments:

In 2007 - 2010, MERITO staff participated in one workshop (2008), leading a 2-hour session for **20** teachers from central and southern California. This session introduced the MERITO Academy watershed and ocean literacy curriculum, and demonstrated two lesson plans from its activity guide. Additionally, the MERITO team was invited in 2009 to help program coordinators (at MLML) incorporate more content and tools into their workshop, for teachers to better adapt their programs to multicultural audiences. Program director (Dr. Simona Bartl) has requested grant funding to hire MERITO staff in 2010-2011 to further advance this goal.

d. Evaluation: N/A



3. Multicultural Pedagogy Outreach

a. Target Audience: Professional educators (formal and informal), and youth leaders, working with multicultural audiences.

b. Description:

In response to an identified need for strengthening the local and regional capacity and skills to adequately serve multicultural audiences, MERITO staff is regularly invited to present and lead short sessions at various professional development training and public events on science and ocean-related education (regionally, nationally, and internationally). MERITO staff co-developed the training, *“Adapting Your Program for Multicultural Audiences”* in collaboration with Monterey Bay Aquarium staff, to disseminate the importance of incorporating cultural diversity considerations into environmental education programs, and provide specific pedagogical tools to environmental education practitioners.

c. Accomplishments:

Between 2007 - 2010, MERITO offered multicultural pedagogy outreach and professional development to **425** pre-service and in-service educators. **In 2007**, MERITO staff led a workshop session at the East Bay Environmental Education Network Professional Development Conference in Oakland, CA. The workshop “Adapting your Interpretive Approach for Diverse Audiences” complemented the conference theme “Working Together to Strengthen Our Practices”. **In 2008**, MERITO staff with two MERITO Academy leaders, presented two workshops at the statewide conference of the Association for Environmental and Outdoor Educators (AEOE) in Malibu, CA. The workshops “Adapting your Interpretive Approach for Diverse Audiences, Part II” and “Make the Connection!” complemented the conference theme “Unless...”. In the same year, MERITO staff also presented two sessions (“Adapting your Interpretive Approach for Diverse Audiences” and “Multicultural Education”) at the California Bay Watershed Education and Training Conference in Carmel, CA, and co-hosted three professional development training sessions for 50 California BWET recipients in San Francisco, Santa Barbara, and Monterey, CA. **In 2009**, MERITO staff presented at the statewide conference of the Association for Environmental and Outdoor Educators (AEOE) in Marin, CA. The workshop “Make the Connection!” complemented the conference theme “Education Unplugged”. MERITO staff also presented at the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) 2009 National Conference in Dallas, TX. The workshop “Serving our Communities Through Marine Science: An Ocean of Opportunities” complemented the conference theme “Improving the Human Condition: Challenges for Interdisciplinary Science”. **In 2010** MERITO staff offered a guest lecture for 200 students of UC Santa Cruz’s *Sociology 103B: Logic and Methods of Social Inquiry* class. The lecture focused on the evolution of MERITO Academy’s logic model and survey tools over the past 5 years, and the integration of scientific research methods into the non-profit sector.

d. Evaluation:

Informal / personal feedback.

4. Student Internship Program

a. Target Audience: Undergraduate and graduate students, preferably from STEM underrepresented demographic groups.

b. Description:

MERITO offers paid internship opportunities for college students to assist in various aspects of program implementation and service to specific target audiences. Between 2002-2007 MERITO partnered with California State University Monterey Bay to offer paid internships and job training opportunities to Hispanic undergraduate and graduate level students. This internship program proved to be a valuable mechanism to expose and engage college students to professional experiences and career opportunities in science, and increasing their understanding about watersheds, marine ecology, environmental policy, and resource management challenges. At the same time, these interns represented a role model for other Hispanic students and families. Unfortunately this partnership ended in 2007 due to the end of USDA grant funds. MERITO continues to seek strategies and partnerships, making valuable internship opportunities possible.

c. Accomplishments:

In 2009, MERITO signed an agreement with the Monterey Institute of International Studies (MIIS) for co-sponsoring graduate-level interns, some of which are enrolled in a graduate program on Teaching English as Second Language. Between 2009 - 2010, MERITO hired 3 MIIS students to assist the team in the implementation of two different projects. This was a mutually beneficial experience for both the interns and MERITO.

d. Evaluation: N/A



**Professional
Development
&
Internships**

MEDIA-BASED COMMUNITY OUTREACH

The use of media-based tools, social networking and mass media outlets has been a secondary strategy for MERITO to reach out to larger numbers of people with concise targeted messages.

1. Immersion Presents

a. Target Audience: General public, and targeted middle school classrooms in US and Mexico.

b. Description:

Immersion Learning™ is a non-profit science education organization that brings ocean adventures and discoveries from Mystic Aquarium & Institute for Exploration, the University of Rhode Island, and NOAA to kids in classrooms, after-school settings and informal learning arenas. The internet-based *Immersion Presents* program features live broadcasts from real scientific expeditions (once a year), helping students understand the positive roles science and technology play in their everyday lives, and igniting their interest in real discovery and learning. The program also includes hands-on science activities aligned with National Science Education Standards (NSES) for grades 5–8, and Ocean Literacy Essential Principles & Fundamental Concepts.

c. Accomplishments:

In 2008, Immersion Learning™ featured “*Immersion Presents: Monterey Bay Expedition.*” MBNMS staff hosted a full week of daily live broadcasts from the decks of the *R/V Fulmar*, highlighting features of Monterey Bay’s coastal and marine ecology. MERITO staff hosted one of these broadcasts in Spanish, for Latino viewers across the nation and at a PIN site in Monterrey, Mexico. The 20-min segment focused on Kelp Forest Ecology, and it reached students and teachers nationwide. Although a one-time event, this program served to increase national and international visibility of both the MBNMS and the MERITO program.

The broadcast was archived and it can be viewed at Immersion’s website:

http://www.immersionlearning.org/index.php?option=com_content&task=view&id=347&Itemid=183

d. Evaluation: N/A



Media-based
Community
Outreach

2. Multicultural Voices for Ocean Literacy

a. Target Audience: Middle school (5th-8th grade) students from historically under-served communities in the central California coast.

b. Description:

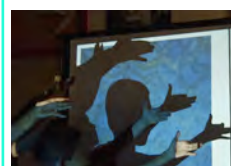
Multicultural Voices for Ocean Literacy (MVOL) is a new project of the MERITO program, seeking to integrate digital storytelling and self-directed learning of ocean sciences among under-served and STEM underrepresented communities in the central and southern California coasts. The project is a multi-partner effort designed to engage culturally diverse youth in guiding their own learning of ocean science and ocean conservation, through the crafting of digital narratives, using their own personal voice, and speaking from their unique cultural and socioeconomic background. This project was created in response to a solicitation from the National Science Foundation (NSF), under its *Informal Science Education* Program. It has been submitted three times, receiving increasingly higher ratings every time, but no funding yet. MVOL will complement the existing MERITO Academy curriculum, promoting self-directed learning of ocean science in a fun and creative way, and it will boost MERITO's outreach by opening a web-based public forum for youth to share their experiences and understanding of the ocean through creative narratives, visual art, and digital stories. The overall initiative will create an inclusive space, in the central California coast for multiple voices and stories about the ocean to be shared and listened to.

c. Accomplishments:

In spite of unsuccessful requests for funding through NSF, MERITO has been able to pilot this project with limited resources and small grants. In 2009 and 2010, MERITO staff mentored a total of **110** middle school students to produce digital stories about their personal connection to the ocean, as well as their experience and understanding of basic science and conservation of marine ecosystems in the Monterey Bay. Participants learned about ocean related topics in an interactive and creative way as they created digital narratives and combined science and ocean conservation messages with their own personal experiences and understanding of the ocean. Students worked in teams to produce **19** short films or digital stories (<4min in length), which were then submitted for public screening at the **Blue Ocean Film Festival**, taking place in August 2010, in Monterey, CA.

d. Evaluation:

Informal feedback from teachers and students only. There hasn't been enough funding to conduct a formal evaluation of this project.



**Media-based
Community
Outreach**

3. Thank You Ocean Campaign (website and PSA)

a. **Target Audience:** Spanish-speaking “General Public”

b. **Description:**

California’s *Thank You Ocean* Campaign is a nonprofit partnership supported by the State of California, NOAA’s Office of National Marine Sanctuaries and the Ocean Communicators Alliance. The campaign’s mission is to raise awareness of the benefits the ocean provides to us and to identify ways each of us can help protect the ocean in our everyday lives. The campaign features public service announcements (PSA) produced by world-renowned cinematographer Bob Talbot, an out-of-door advertising campaign, a bi-weekly podcast series featuring leaders in ocean policy, and a website. The campaign focuses on educating the public about the importance of sustaining ocean life and inspiring Californians to practice ocean stewardship to alleviate four major threats to the ocean: Climate Change, Marine Debris, Water Pollution, and Marine Life Decline.

c. **Accomplishments:**

In 2009, MERITO staff from CINMS and MBNMS collaborated to produce the Spanish translation of the *Thank You Ocean* campaign’s website www.thankyouocean.org and a campaign’s PSA featuring renowned actor and activist Edward James Olmos. These Spanish language website and PSAs will expand the potential reach of the *Thank You Ocean* campaign to a large and important segment of the population in California.

d. **Evaluation:** N/A

4. Water Quality Protection Video

a. **Target Audience:** Potential volunteers from communities in the central California coast

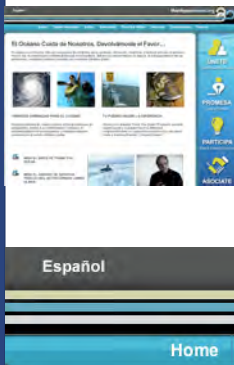
b. **Description:**

The MERITO and Water Quality Protection teams at MBNMS have been collaborating since 2008 (and were jointly awarded a grant from the Community Foundation of Monterey County) to facilitate higher participation from Latino communities in water quality protection activities around the Monterey Bay. In 2009, MERITO staff recruited 21 Latino volunteers from the city of Salinas to participate in the annual volunteer water-quality-monitoring event *Snapshot Day*. This was the first time in 10 years the event had Latino volunteers and five bilingual teams.

c. **Accomplishments:**

In support of this effort, a Spanish-English bilingual promotional video was produced in 2009, highlighting water quality protection issues and volunteer opportunities in the Monterey Bay area. This video was posted for public access on YouTube (<http://www.youtube.com/watch?v=yJs5YNpHt6k>), and it is also available for use in focused classroom activities with targeted audiences.

d. **Evaluation:** N/A



**Media-based
Community
Outreach**

INTERNATIONAL NOAA PROGRAMS SUPPORT



MERITO staff has assisted as bilingual instructors and interpreters in several international capacity building programs of NOAA's Office of National Marine Sanctuaries.

1. Chile 2007

a. Target Audience: Chilean government officials involved in the US-Chile *Bilateral Agreement on Fisheries Cooperation*.

b. Description:

NOAA's Office of National Marine Sanctuaries has offered technical assistance to help implement the US-Chile *Bilateral Agreement on Fisheries Cooperation* (MPA cooperation section). In support of this assistance the U.S. Department of State's *American Government Fellows Program* has sponsored NOAA employees and contractors to conduct short-term exchanges, and more specifically to facilitate the coordination between government agencies in the two countries, involved in this bilateral agreement.

c. Accomplishments:

In 2007, MERITO's bilingual education specialist Sonya Padrón was invited to participate in a international ONMS delegation traveling to Chile, and to assist in a number of tasks related to the implementation of the US-Chile *Bilateral Agreement on Fisheries Cooperation*. Sonya provided translation and interpretation services focusing on the MPA cooperation section, and she gave a number of presentations to local officials and academics representing various organizations, including: Sernapesca, University of Antofagasta, Chilean Navy (Armada), Comision Nacional del Medioambiente (CONAMA), Centro de Investigación Marina de Quintay (CIMARQ - a research division of the Universidad Andres Bello in Santiago de Chile), and *Servicio Nacional de Pesca s Region II* office in Antofogasta, Chile. Sonya also presented to an international delegation of marine conservation practitioners and managers (from Ecuador, Colombia, Panama, Peru, and Chile) at the *I Taller Internacional de Areas Marinas Protegidas* in Valparaiso. All of these presentations discussed the MERITO program, its products, goals, evaluation protocols, and outreach methods, in an effort to exchange experiences on education and outreach initiatives related to the implementation of Marine Protected Areas.

d. Evaluation: N/A



International
NOAA
Support



2. Ecuador 2008

a. Target Audience: Eastern Tropical Pacific Seascape (ETPS) stakeholders from Colombia, Panama, Ecuador and Costa Rica.

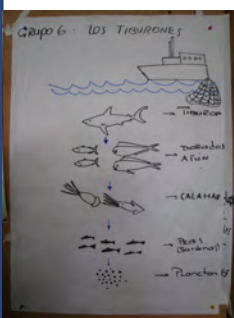
b. Description:

NOAA's Office of National Marine Sanctuaries, International Program Office and Coastal Services Center partnered with Conservation International, UNESCO, National Parks of Colombia, and the Malpelo Foundation to develop a series of regional MPA Management Capacity Building trainings for the *Eastern Tropical Pacific Seascape* (ETPS). The ETPS is a regional effort (and official international agreement) aiming to conserve 2 million square kilometers of ocean from Costa Rica to Ecuador with zones in Panama and Colombia. The region covers international waters, and several UNESCO World Heritage sites, including the Galapagos, Cocos, Malpelo and Coiba islands. NOAA's training program seeks to provide a knowledge base for developing local and regional capacity and expertise in designation, implementation and management of MPAs. The program provides developing nations with the opportunity to benefit from the experiences of other developing or developed nations, who may have a longer history of MPA management, and to share experiences to promote cooperation on designation and management of a global system of MPAs.

c. Accomplishments:

In 2008 MBNMS-MERITO Program Coordinator Sacha Lozano participated as a bilingual instructor and interpreter in one of these international NOAA trainings, focusing on *Marine Protected Areas and Sustainable Fisheries*, in Machalilla Ecuador. The 2-week training was part of an on-going collaboration between NOAA, Conservation International, UNESCO, and MPA practitioners and government agencies from Costa Rica, Panama, Colombia and Ecuador, involved in the ETPS initiative. Participants included government officials, MPA managers, staff, and fishermen from marine protected areas in Colombia, Costa Rica, Panama, Ecuador and Chile. The training provided an overview of available tools and strategies to design, implement and enforce effective marine protected areas to enable sustainable fishing activity.

d. Evaluation: N/A



International
NOAA
Support

3. Mexico 2010

a. Target Audience: Stakeholders at Gulf of California’s MPA network capacity building program “CAPAMP”

b. Description:

NOAA's Office of National Marine Sanctuaries, International Program Office and Coastal Services Center have partnered with a number of international organizations and national governments in critical regions (marine conservation “hot spots”) around the world, to develop a series of *MPA Management Capacity Building* trainings. This training program seeks to provide a knowledge base for developing local and regional capacity and expertise in designation, implementation and management of MPAs. The program provides developing nations with the opportunity to benefit from the experiences of other developing or developed nations, who may have a longer history of MPA management, and to share experiences to promote cooperation on designation and management of a global system of MPAs.

c. Accomplishments:

In 2010 MERITO staff once again supported this international effort, participating as bilingual instructor and interpreter in the *Gulf of California s Stakeholder Engagement Training* in La Paz (Baja California), Mexico. This training was sponsored by the World Wildlife Fund and Conservation International, and it was co-led by 3 staff members from NOAA’s Office of National Marine Sanctuaries. It was the second in a series of 6 trainings intended to bring together stakeholders throughout the Gulf of California, in order to improve management of Marine Protected Areas within the Gulf. Thirty-nine participants from 12 MPA’s attended the 6-day workshop focusing on stakeholder engagement. Topics included participatory decision making, co-management arrangements, advisory councils, fisheries co-management, community-based management and livelihood diversification.

d. Evaluation: N/A

1. Grants

The MERITO program runs on soft funds. Program operational aspects and staff are entirely funded through grants, NOAA-ONMS discretionary funds, and in kind support from partner organizations. In consequence, a significant amount of staff time is devoted to fundraising efforts (instead of programmatic activities). During 2007-2010 a total of 27 grant proposals were submitted to different funding agencies, requesting an average of \$1,250,000.00 every year. The program has been able to get about 10% of its total grant requests per year, receiving a total of **\$301,724** in grants between 2007 and 2010. Summary below:

Grants	Funding Agency	Requested	Awarded
FY2008			
MERITO Academy	NOAA B-WET	\$50,000.00	\$50,000.00
Snapshot Day (Latino participation)	Community Foundation of Monterey County	\$10,000.00	\$10,000.00
Family Field Experiences	Harden Foundation	\$47,985.00	\$0.00
MERITO Academy (DVD and activity guide)	Ernest F. Hollings Ocean Awareness Trust Fund	\$24,975.00	\$24,975.00
Climate Science Teacher Training	NASA - Global Climate Change Education	\$149,848.00	\$0.00
Ocean Literacy and Digital Storytelling	National Science Foundation (NSF)	\$931,546.00	\$0.00
Ocean Literacy Teacher Training	NOAA Office of Ocean Exploration	\$50,222.00	\$0.00
Subtotal FY2008		\$1,264,576.00	\$84,975.00
FY2009			
MERITO Academy	NOAA B-WET	\$59,784.00	\$59,784.00
MERITO Adult Education	NOAA B-WET	\$30,100.00	\$30,100.00
MERITO Academy photography project	Ernest F. Hollings Ocean Awareness Trust Fund	\$24,995.00	\$0.00
Family Field Experiences	Monterey Bay Sanctuary Foundation	\$6,400.00	\$6,400.00
MERITO Adult Education	National Fish & Wildlife Foundation (NFWF)	\$59,388.00	\$0.00
Ocean Literacy and Digital Storytelling	National Science Foundation (NSF)	\$931,546.00	\$0.00
Family Field Experiences	California Stewardship Council	\$49,866.00	\$0.00
Ocean Literacy media-based outreach	Thank You Ocean campaign (website translation)	\$3,750.00	\$3,750.00
Ocean Literacy media-based outreach	Thank You Ocean campaign - PG&E	\$20,000.00	\$0.00
MERITO Academy	REI, Inc.	\$5,000.00	\$5,000.00
Subtotal FY2009		\$1,190,829.00	\$105,034.00
FY2010			
MERITO Academy	NOAA B-WET	\$59,828.00	\$59,828.00
MERITO Adult Education	NOAA B-WET	\$29,600.00	\$29,600.00
MERITO Academy	Bureau of Land Management (BLM)	\$10,000.00	\$10,000.00
Ocean Literacy and Digital Storytelling	Monterey Bay Sanctuary Foundation	\$5,000.00	\$5,000.00
Ocean Literacy and Digital Storytelling	National Science Foundation (NSF)	\$998,443.00	\$0.00
MERITO Adult Education	Monterey Regional Water Board (IRWM Plan)	\$84,455.00	pending
Sea Studios partnership ("Otters" film)	National Science Foundation (NSF)	\$30,000.00	pending
MERITO Academy	REI, Inc.	\$7,287.00	\$7,287.00
MERITO Academy	Stewardship Council	\$50,000.00	pending
MERITO Academy	Environmental Protection Agency (EPA)	\$50,000.00	\$0.00
Subtotal FY2010		\$1,324,613.00	\$111,715.00
TOTAL Fundraising Activity 2007-2010		\$3,780,018.00	\$301,724.00

2. Partnerships

MERITO education and outreach efforts are possible (to a very significant extent) thanks to partnerships and in kind support from a variety of non-profit organizations, government agencies, private youth programs, schools and other academic institutions, and local and national sanctuary foundations.

In-kind Support 2007 - 2010:

- Elkhorn Slough National Estuarine Research Reserve (ESNERR) provided logistic and staff support (conference room, lab facilities, equipment, staff time) for MERITO site-based programming and MERITO Academy teacher trainings.
- California Department of Parks & Recreation - Monterey District provided support to MERITO's site-based programming through planning meetings, free admission, and staff support.
- Monterey Institute of International Studies provided a 3:1 co-sponsoring opportunity to hire graduate-level interns for the program.
- Boys and Girls Clubs of Monterey County provided logistic and staff support for MERITO's digital storytelling and ocean literacy pilot program.
- Monterey Institute of International Studies - Teaching and Learning Collaborative provided logistic and staff support for MERITO's digital storytelling and ocean literacy pilot program.
- Monterey Bay Aquarium provided free entrances and staff support for MERITO Academy and MERITO's digital storytelling and ocean literacy pilot program.
- Monterey County Office of Education, the Pajaro Valley Unified School District, and Public and Private after-school programs supported the MERITO Academy After-school Program implementation by covering teacher salaries.
- City of Watsonville, Watsonville Wetlands Watch, and CSUMB's Return of the Natives supported implementation of the MERITO Academy by covering staff time and equipment.
- Amy Holste (MIIS student) donated a laptop to support MERITO's digital storytelling and ocean literacy pilot program.
- MERITO staff continues to work with the local Monterey Bay Sanctuary Foundation and the National Marine Sanctuary Foundation on various fundraising strategies to sustain the program.

MERITO's main priority for next year is to secure a stable funding base to sustain at least one full-time staff position. Otherwise, the program will likely disappear. MERITO is particularly relevant to NOAA because it serves a specific demographic (not only Latino), which is largely underrepresented in the ocean science and conservation workforce, as well as in Science, Technology, Engineering and Mathematics (STEM). MERITO is also a central strategy within the *Ocean Literacy and Constituent Building* Action Plan, in the officially-mandated (and community-endorsed) MBNMS Management Plan.

With uncertain and unstable funding sources, MERITO will have to continue morphing in response to guidelines and expectations from different -temporary- funding agencies, compromising program consistency and credibility among the communities it serves.

In spite of a demonstrated success and great interest from other ONMS sites, no regional expansion or new program development is possible at this point.

In the next year, MERITO will concentrate all programmatic efforts on its two core components: MERITO Academy (teacher training and middle school curriculum) and Adult Education.



In 2008 MERITO was recognized with a Department of Commerce Silver Medal Award for customer service.